practice be planned chiefly with a view of best utilizing the services of birds in destroying white grubs; a remarkable tribute to the effectiveness of practical economic ornithology:

"Birds are most persistent followers of the plough during their breeding season or while migrating; gulls and terns from May 16th to June 22d, and for a short time late in July; crows and blackbirds, including grackles, from the time grubs appear in May until July 1st.

"From the foregoing we reach the conclusion that to attain the best possible results under conditions existing in Manitoba, ploughing should be done between May 14th and July 1st, and at an average depth of five inches. The idea is, of course, to turn up as many grubs, eggs, or pupe as possible, a majority of which will, in all probability, be picked up by birds. Many eggs will be destroyed by the plough alone, but it is advisable to harrow as soon as possible after ploughing, as by this means numerous egg cells will be broken, causing a large percentage of deaths among the eggs and newly-hatched young, besides exposing them to attack by birds. Exposed pupe will also be destroyed by this method.

"So far as the interests of farming is concerned, it will be observed that the above recommendations do not in any way clash with the best cultural methods. There is good reason for believing, too, that they will prove of value in the destruction of wireworms.

"With reference to the large part birds are expected to play in this work, it may be claimed that birds are not always present in sufficient numbers, and that their capacity is, after all, limited. Granting this to be true in certain districts, we must remember that white grubs are only found within comparatively close range of trees, and that their principal habitats coincide with the haunts of Crows, the most persistent of all plough followers. Thus, if there are no Crows present the farmer and sportsman are probably largely to blame, and the question then resolves itself into the economic one as to which does most harm, the Crows or the white grubs. We do not think there can be much doubt on this point in grub-infested localities. The writer has personally seen fully ninety per cent of white grubs exposed picked up by Crows when he was himself the ploughman.

"Blackbirds are more dependent upon water than Crows, hence are not so evenly distributed, but when present prove very efficient grub destroyers. Cowbirds (*Molothrus ater*) are also extremely useful in this respect, and probably largely compensate for their parasitic habits by this means."—W. L. M.

The Ornithological Journals.

Bird-Lore. XXI, No. 1. January-February, 1919.

When the North Wind Blows. By A. A. Allen.—Excellent photographs of winter birds and account of the actions of the White-breasted Nuthatch.

Our Responsibility. By Mabel Osgood Wright.— Another admirable account of winter bird life, in Connecticut.

Notes from a Traveller in the Tropics. Cuba to Panama. By Frank M. Chapman.

An Evening with Birds in Florida. By J. W. Lippincott.

The Great Horned Owl. By F. N. Whitman.— Account of nest and young.

Under 'Migration and Plumages of North American Birds' the Ravens are considered, and there is the usual large collection of Christmas lists.

The Condor. XX, No. 6. November-December, 1918.

Nesting of the Rocky Mountain Jay. By W. C. Bradbury.— A valuable account with numerous illustrations of the bird, its nest, eggs, and haunts.

Description of a new Lanius from Lower California. By Harry C. Oberholser.— Lanius ludoricianus nelsoni (p. 209), Todos Santos.

Mr. P. A. Taverner has a letter explaining his practice of employing only binomial nomenclature until the necessary specimens and comparisons are available to ensure beyond a doubt to which race the bird in question belongs (see beyond p. 316).

The Condor. XXI, No. 1. January-February, 1919.

A Return to the Dakota Lake Region. By Florence Merriam Bailey.—

A continuation of this delightful article.

The Solitaires of Shasta. By W. Leon Dawson.— Good account of the bird and its nesting, with illustrations from photographs.

Nesting of the Short-eared Owl in Western Washington. By E. A. Kitchin.—Good illustrations of nest and young.

Problem: Do Birds Mate for Life? By J. Eugene Law.— The same suggestion is made, among others, as is offered in 'The Auk,' p. 138, in comment on a paper of similar title by F. C. Willard. A further extended comment on the same paper follows Mr. Law's, which is by N. K. Carpenter and supports Mr. Willard, although the evidence except in one instance is no more convincing than was his.

Parasitism of Nestling Birds by Fly Larva. By O. E. Plath.—This is a valuable account of the same parasites referred to in a letter of Dr. W. W. Arnold in 'The Auk' for January, 1919, p. 147, giving a much fuller history of the insect.

Wilson Bulletin. XXX, No. 4. December, 1918.

Finding the Nest of the Knot. By W. Elmer Erkblaw.—On the Crocker Land Expedition, in 1916. Eggs now in the American Museum of Natural History.

Migration Records for Kansas Birds. By Bessie P. Douthitt.—This instalment covers the water birds only. The nomenclature does not follow the A.O. U. List but seems to be a compilation from various authors who have ideas of their own on this subject. The result is rather startling. In the Cranes for instance, the author divides our three species, which everyone has regarded as congeneric, into two groups Linnogeranus and

Grus, names which by the way are synonyms. As we have stated before we can see no result but confusion in departing from the generally recognized A. O. U. names in local lists of North American species.

Revisory Notes on the List of the Birds of Nebraska. By Myron W. Swenk.—In this list too we find names which have not been authorized by the A. O. U. 'Check-List.'

The Oölogist. XXXV, No. 12. December, 1918.

Observations on a Family of Winter Wrens. By Alex. D. McGrew.—Data on the feeding of the young, with photographs of the female, at Endeavor. Pa.

The Oölogist. XXXVI, No. 1. January, 1919.

Some Nesting Birds of the Palisades Interstate Park. By P. M. Silloway. The Ibis. (XI Series), I. No. 1. January, 1919.

Notes on Collections of Birds in the British Museum, from Ecuador, Peru, Bolivia, and Argentina. Part I. Tinamidæ—Rallidæ. By Charles Chubb.—This report covers collections made by Perry O. Simonds in the countries mentioned which have been presented to the Museum by Mr. Oldfield Thomas; as well as the Goodfellow Ecuador Collection and one made by the late Lord Brabourne in northwestern Peru.

The following new forms are described. Crypturus garleppi affinis (p. 8), Rio Blanca, Bolivia; Chamæpetes goudotii antioquiana (p. 22), Valdivia, Antioquia, Colombia; Odontophorus guianensis simonsi (p. 26), San Ernesto, Mapiri, Bolivia; O. g. panamensis (p. 26), Panama; O. g. buckleyi (p. 27), Sarayacu, eastern Ecuador; Zenaida auriculata noronha (p. 36), Fernando Noronha Island; Leptoptila verreauxi brevipennis (p. 45), Trinidad; Pardicallus rityrhynchus tschudii (p. 50), Junin, central Peru; Aramides cajanea grahami (p. 53); Para.

Birds from the North of France. By Capt. A. W. Boyd.— An annotated list covering a year's service in the British Army in the departments of Pas de Calais, Somme and Nord.

On One of the Four Original Pictures from Life of the Reunion or White Dodo. By Lord Rothschild.—An interesting historical sketch with reproduction of the picture.

A Note on Capt. Beebe's Monograph of the Pheasants. By H. J. Elwes.—A tribute to the work, with some important criticism on the value of certain races there recognized.

On the Eclipse Plumage of Sporophila pileata. By F. E. Blaauw.— Has distinct winter and summer plumages.

List of the Birds of the Canary Islands, with Detailed Reference to the Migratory Species and the Accidental Visitors.—Part I. Corvidæ–Sylviidæ. By David A. Bannerman.—This is a remarkably complete treatment of the subject, the author having made an exhaustive study of the literature and taken a number of trips to the islands. The present publication is preliminary to a proposed book on the subject.

In the reviews the editor of 'The Ibis' honors us by crediting 'The Auk' with some 300 more pages than actually appeared in the 1918 volume; we

hope however that ere long we may be able to live up to his generous allowance!

Bulletin of the British Ornithologists' Club. CCXXXVII. November 30, 1918.

This number contains the annual review of ornithological activities by the Chairman, Mr. W. L. Sclater.

There are also descriptions of a number of new species, as follows: By W. L. Sclater; Buteo jakal archeri (p. 17), Waghar, Somaliland. By E. C. Stuart Baker; Bhringa remifer peracensis (p. 18), Telom, Malay Peninsula; Picus canus gyldenstolpei (p. 19); Sadiya, Assam; Thereiceryx lineatus intermedius (p. 19), Pahpoon, Burmah; Cyanops duvaceli robinsoni (p. 20), Klang, Malay Peninsula; Pitta carulea hosei (p. 20), Mt. Dulit, Borneo. By Dr. Hartert; Corvus rhipidurus as a substitute for Corvus affinis Ruppell (p. 210). By Charles Chubb; Gampsonyx swainsmii magnus (p. 21), Amotape, Peru; G. s. leonæ (p. 22), Leon, Nicaragua; Falco rufigularis petoensis (p. 22), Peto, Yucatan; F. r. pax (p. 22), Charuplaya, Bolivia. By G. M. Mathews: Diomedia exulans westralis (p. 23), W. Australia, off Albany; Acanthiza pusilla peroni (p. 23), Peron Peninsula, Australia; Leggeornis lamberti hartogi (p. 24), Dirk Hartog Island, Australia; Urodynamis taitensis belli (p. 24); Norfolk Island.

Bulletin of the British Ornithologists' Club. CCXXXVIII January 3, 1919.

Mr. Chas. Oldham gave an extended account of the breeding of the Black-necked Grebe (*Podiceps nigricollis*).

Mr. E. C. Stuart Baker discusses the races of *Alcedo meninting* of which he recognizes six. *A. m. coltarti* (p. 39), from Saddya, Assam and *A. m. scintillans* (p. 38), Bankasoon, are described as new.

Dr. Hartert proposed Aegithalos caudatus pyrenaicus for a new race recently described in 'Novitates Zoölogica' but inadvertently not named.

Mr. Chas. Chubb described: Sclerurus mexicanus certus (p. 41) Guatemala, Volcan de Agua; S. m. macconnelli (p. 41), Ituribisi River, British Guiana; S. m. peruvianus (p. 41), Yurimaguas, east Peru; S. m. bahiæ (p. 42), Bahia, Brazil; and the new genus Poliolæma (p. 42), for Myrmotherula cinerciventris (Scl. & Salv.).

Bulletin of the British Ornithologists' Club. CCXXXIX. January 29, 1919.

Mr. Stuart Baker described as new, Penthoceryx sonnerati waiti (p. 47), Ceylon. Dr. Hartert; Serinus buchanani (p. 50), Maktan, East Africa. Mr. Chas. Chubb; Dendrocincla bartletti (p. 50), Chamicuros, east Peru; D. fuliginosa wallacei (p. 52), Para, Brazil; Xenops genibarbis cayoensis (p. 52), Cayo, British Honduras.

British Birds. XII, No. 7. December, 1918.

The Moults and Sequence of Plumages of the British Waders. By Annie C. Jackson.— Northern Phalarope, Stilt, Avocet and Godwit. Concluded in the next number, which contains the Curlew, Snipe and Woodchuck.

Avicultural Magazine. X, No. 3. January, 1919.

Colour Change in the Plumage of Birds. By Dr. V. G. L. Van Someren. — A most important reply to a paper by Dr. A. G. Butler which claimed color change in a Weaver Bird (Pyromelana) and referred to Turacus as a good illustration of the passing of pigment up the vanes of fully formed feathers. The author states that numerous experiments with the crimson feathers of the latter genus from both skins and living birds failed to show any loss of color. Similar experiments in the Philadelphia Zoölogical Garden, it might be added, resulted in the same way. In regard to the Weaver, all Dr. Van Someren's birds effected the change by molt as might be expected, and they ate many of the feathers which accounts for the lack of cast feathers in many accounts of supposed color change. These observations should settle this vexed question.

Avicultural Magazine. X, No. 2. December, 1918.

The Pigeons of the Gambia. By E. Hopkinson.

The Emu. XVIII, Part III. January, 1919.

Haunts of the Letter-winged Kite (Elanus scriptus Gould). By Sidney W. Jackson

An interesting account of a trip through Western Queensland with a list of the birds observed. Illustrations of the nest, eggs and young of the Kite.

Notes on Birds from the Gouldian-Gilbert Type Locality, North Australia. By A. J. Campbell.— This paper is an account of a collection made by Wm. McLennan near Port Essington, the spot where Gilbert collected so many of the birds described by Gould. In commenting on the type localities quoted by Mr. Mathews, the author calls attention to the fact that they do not always agree with those given by Gould in his original descriptions, in the 'Proceedings' of the Zoölogical Society. Mr. Campbell would do well to consult the paper prepared by Mr. Mathews and the editor of 'The Auk.' (Austral Avian Record, Vol. I, No. 6-7), in which the history of the Gould collection is given and individual specimens selected as the types. The collection is not at Washington, as Mr. Campbell supposes, but at Philadelphia, in the museum of the Academy of Natural Sciences, where it has been ever since it left Europe. The fact that Gould described a few birds from the north-west coast of Australia, before Gilbert reached Pt. Essington, as stated by Mr. Campbell, is interesting and would seem to indicate that the latter should not be quoted as the type locality. In such cases, when all the specimens were labelled Pt. Essington, we selected one of them as the type, as it seemed likely that the labelling might be inaccurate and no other possible types seemed to be in existence.

Four Ornithological Trips to the Nullabor Plains. By Capt. S. A. White.— An interesting account of travel in this region with many illustrations.

Revue Française d'Ornithologie. X., No. 114. October 7, 1918. [In French.]

Contribution to a Study of the Storm Petrels of the Mediterranean. By L. Lauden,

Researches on the Group of Saxicola aurita and S. stapazina. By M. Bede (concluded in the next number).

Study of a Collection of Birds made by M. E. Wagner in the Provence of Misiones, Argentina. By A. Menegaux (continued in the next number).

Revue Française d'Ornithologie. X., No. 115. November 7, 1918. Two Character Indices and Differentials of the Passeres, Waders and Gallinaceous Birds. By Maurice Boubier.— Comparisons of the relative length of the first and middle digits, and between the length and breadth of the bill.

The December number consists of an index to the volume.

Ornithological Articles in Other Journals.

Oberholser, H. C. Description of a New *Iole* from the Anumba Islands. (Proc. Biol. Soc. Washington XXXI, December 30, 1918.— *I. olivacea crypta* (p. 197).

Oberholser, H. C. Status of the Genus Orchilus. Cabanis. (*Ibid.*) — Nothorchilus, gen. nov. (p. 204) type Platyrhynchus auricularis Vieill.

Hartert, Ernst. Notes on Starlings. (Novitates Zoöl., XXV, No. 2, November, 1918.)— A review of the races of *Sturnus vulgaris*, of which 19 are recognized, *S. v. zetlandicus* (p. 329) North Yell, Shetland Isls., is described as new.

Hartert, Ernst and Goodson, A. T. Notes on Pigeons. (*Ibid.*).—Revisions of various species. The following new forms are proposed: *Ptilinopus rivolii buruanus* (p. 347), Buru; *Treron calva poensis* (p. 350), Fernando Po; *T. c. breviccra* (p. 353), Moschi, E. Africa; *T. c. sejuncta* (p. 353), Portuguese Guinea; *T. curvirostra hainana* (p. 356), Hainan; *Gcopelia maugeus audacis* (p. 358) Tenimber.

Hartert, Ernst. Some Nomenclatorial Notes. (*Ibid.*).— Reference to Navás' 'Ornithologia de Aragón (1907)' and new names proposed therein. Also the following changes. *Corvus affinis* Rupp. becomes *C. brachyrhynchos* Brehm; *Oriolus melanocephalus* L. 1766 becomes *O. luteolus* (L.) 1758; *Muscicapa grisola* (L.) becomes *M. striata* (Pall.); *Carpophaga* becomes *Muscadivora* Schl., *Muscidivorcs* Gray being rejected. There is finally a strong protest against changing names on the basis of one letter (or other slight) difference.

Hartert, Ernst. A New Race of Long-tailed Titmouse. (*Ibid.*).—Pyrenees form described but not named (see *antea* p. 310).

Hartert, Ernst. Garrulus bispecularis and its allies with List of all Forms of Garrulus. (Ibid.) — G. b. persaturatus (p. 430) Khasia Hills, G. b. interstinctus Darjiling.

Hartert, Ernst. Further Notes on Pigeons. (*Ibid.*) — *Phlegænas* crinigera basilanica (p. 434), Basilan; *P. c. leytensis* (p. 434), Leyte.

Wait, W. E. Notes on Ceylon Water Birds. Part II. (Spolia Zeylanica, X, Part 39.) October, 1917.